

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. 6,951,894

APPLICATION NO. 09/640,526

ISSUE DATE: OCTOBER 4, 2005

INVENTORS: NICOLSON, et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In column 70, line 55, please change "polymerizing - said" to --polymerizing said--.

In column 71, line 21, please change "material and upper" to --material having upper--.

In column 72, line 4, please change "of grater than" to --of greater than--.

In column 72, line 4, please change " $6.4 \times 10^{-6}$ " to -- $6.4 \times 10^{-6}$ --.

In column 72, line 6, please change " $0.4 \times 10^{-6}$ " to -- $0.4 \times 10^{-6}$ --.

In column 72, line 65, please change " $0.4 \times 10^{-6}$ " to -- $0.4 \times 10^{-6}$ --.

In column 73, line 1, please change " $6.4 \times 10^{-6}$ " to -- $6.4 \times 10^{-6}$ --.

In column 73, line 62, please change "treatment is a" to --treatment includes a--.

In column 73, lines 63-65, please change "wherein said oxypem polymerizable material is a fluorine macromer and said ionopem polymerizable material" to --wherein said ionopem polymerizable material--.

In column 74, line 16, please change "material comprises a fluorine macromer, and" to --material is formed from--.

In column 74, line 43, please change " $6.4 \times 10^{-6}$ " to -- $6.4 \times 10^{-6}$ --.

In column 74, line 45, please change " $0.4 \times 10^{-6}$ " to -- $0.4 \times 10^{-6}$ --.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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Banner & Witcoff, Ltd.  
10 South Wacker Drive  
Suite 3000  
Chicago, IL 60606

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In column 75, line 35, please change "0.4x10-6" to --0.4x10<sup>-6</sup>--.

In column 75, line 37, please change "6.4x10-6" to --6.4x10<sup>-6</sup>--.

In column 76, lines 3 and 4, please change "(b) polymerizing the core in an atmosphere substantially free from oxygen" to --(b) polymerizing the core formulation in an atmosphere substantially free from oxygen to form a biocompatible lens having a core and surfaces;--.

In column 76, line 8, please change "autoclaving lens" to --autoclaving said lens--.

In column 76, line 25, please change "wherein said ophthalmic lens" to --wherein said biocompatible lens--.

In column 77, lines 9 and 10, please change "54 including (c) said said lens being autoclaved at predetermined temperatures." to --54, said lens being sterilized.--

In column 77, line 39, please change "worn as extended wear lens that is worn for" to --worn as an extended wear lens for --.

In column 77, line 61, please change "continous" to --continuous--.

In column 78, line 9, please change "worn as extended wear lens that is worn for" to --worn as an extended wear lens for--.

In column 79, line 12, please change "6.4x10-6 " to --6.4x10<sup>-6</sup>--.

In column 79, line 14, please change "0.4x10-6" to --0.4x10<sup>-6</sup>--.

In column 79, line 47, please change "continous" to --continuous--.

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In column 80, line 18, please change "absorption" to --adsorption--.

In column 80, line 22, please change " $0.4 \times 10^{-6}$ " to -- $0.4 \times 10^{-6}$ --.

In column 80, line 24, please change " $6.4 \times 10^{-6}$ " to -- $6.4 \times 10^{-6}$ --.

In column 80, line 28, please change "continous" to --continuous--.

In Column 80, line 49, please change "less than about" to --less than about--.

In column 80, after line 49, please add the following claims:

85. An extended wear contact lens comprising a core polymeric material and inner and outer surfaces that are more hydrophilic than said core polymeric material, said core polymeric material formed from a silicone copolymer which provides a high ion permeability and a high oxygen permeability; said silicone copolymer comprising an oxypem polymerizable material, and an ionopem polymerizable material; said core polymeric material having an oxygen permeability equal to or greater than 69 barrers; wherein said extended wear contact lens can be continuously worn for at least fourteen days on a human eye without substantial corneal swelling and without having substantial amounts of lipid adsorption.

86. A siloxane hydrogel contact lens comprising a core polymeric material having hydrophilically modified surfaces that are more hydrophilic than said core material, said hydrogel contact lens being suited to make contact with ocular tissue and ocular fluids, said core polymeric material being formed from polymerizable materials comprising:

- (a) an oxypem polymerizable material, and
- (b) an ionopem polymerizable material,

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wherein said lens has an oxygen permeability of at least about 69 barrers and an ion permeability characterized either by an Ionoflux Ion Diffusion Coefficient of greater than about  $6.4 \times 10^{-6}$   $\text{mm}^2/\text{sec}$  or an Ionoton Ion Permeability Coefficient of greater than about  $0.4 \times 10^{-6}$   $\text{cm}^2/\text{min}$  to enable the lens to move on the eye such that corneal health is not substantially harmed and wearer comfort is acceptable during a period of continuous contact with ocular tissue and ocular fluids,

wherein said hydrogel contact lens is adapted for at least 14 days of continuous wear on a human eye without substantial corneal swelling and without having substantial amounts of lipid adsorption.

87. A biocompatible contact lens having an oxygen permeability of at least about 69 barrers and an ion permeability characterized by an Ionoton Ion Permeability Coefficient of greater than about  $0.4 \times 10^{-6}$   $\text{cm}^2/\text{min}$ , said lens comprising:

(a) a polymeric core material in the shape of contact lens having an inner and outer surface; and

(b) said surfaces of said core material being surface treated to form surfaces that are more hydrophilic than said core material;

said lens having adequate movement on the eye without blinking to promote adequate tear exchange and without producing significant corneal swelling, without having substantial lipid adsorption, and without causing substantial wearer discomfort for a period of continuous contact for 14 days.

88. A biocompatible sterilizable contact lens having an oxygen permeability of at least about 69 barrers and an ion permeability characterized by an Ionoton Ion Permeability Coefficient of greater than about  $0.4 \times 10^{-6}$   $\text{cm}^2/\text{min}$ , said lens comprising:

(a) a polymeric core material in the shape of contact lens having an inner and outer surface; and

(b) said surfaces of said core material being surface modified to form surfaces that are more hydrophilic than said core material;

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said lens having adequate movement on the eye without blinking to promote adequate tear exchange and without producing significant corneal swelling, without having substantial lipid adsorption, and without causing substantial wearer discomfort for a period of continuous contact for 30 days.

89. A contact lens comprising a polymeric material formed from at least:

- (a) an ionoperm polymerizable material comprising at least one of 2-hydroxyethyl methacrylate or N,N-dimethylacrylamide; and
- (b) an oxyperm polymerizable material;

wherein said lens has an oxygen transmissibility of at least about 70 barrers/mm and an ion permeability characterized either by (1) an ionoton ion permeability coefficient of greater than about  $0.25 \times 10^{-5}$  cm<sup>2</sup>/sec, or (2) an Ionoflux diffusion coefficient of greater than about  $1.3 \times 10^{-5}$  mm<sup>2</sup>/min, wherein said ion permeability is measured with respect to sodium ions;

wherein said lens is suitable for continuous, intimate contact with ocular tissue and ocular fluids while having adequate movement on the eye with blinking to promote adequate tear exchange and without producing significant corneal swelling, without having substantial amounts of lipid adsorption, and without causing substantial wearer discomfort during a period of wear of at least 24 hours.

90. The contact lens of claim 89 wherein said ionoperm polymerizable material comprises both 2-hydroxyethyl methacrylate and N,N-dimethylacrylamide.

91. The contact lens of claim 90 wherein said oxyperm polymerizable material comprises at least one of a siloxane containing macromer or a siloxane containing monomer.

92. The contact lens of claim 91 wherein said polymeric material is further formed from ethylene glycol dimethacrylate.

93. The contact lens of claim 92 wherein said lens is autoclaved without lowering either said oxygen transmissibility or said ion permeability below levels sufficient to maintain good corneal health and on-eye movement.

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94. The contact lens of claim 92 wherein said period of wear is at least 4 days.
95. The contact lens of claim 92 wherein said period of wear is at least 7 days.
96. The contact lens of claim 89 further comprising polyvinylpyrrolidone at a surface of said lens.
97. The contact lens of claim 96 wherein said polyvinylpyrrolidone coats said surface of said lens.
98. The contact lens of claim 89 wherein said period of wear is at least 4 days.
99. The contact lens of claim 89 wherein said period of wear is at least 7 days.
100. The contact lens of claim 89 wherein said lens has an equilibrium water content of about 10 to about 30 weight percent.

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